

CLAIMS

What is claimed is:

- 1 1. A system comprising:
2 a transmitter in a first network node to generate a sequence of symbols, the
3 sequence of symbols including preamble symbols and a data symbol; and
4 a receiver in a second network node to receive the sequence of symbols generated
5 by the transmitter, the receiver including a frame synchronizer logic to perform frame
6 synchronization.
- 1 2. The system of claim 1, wherein a last preamble symbol in the sequence of
2 symbols has a different waveform than other preamble symbols in the sequence of
3 symbols.
- 1 3. The system of claim 1, wherein a waveform of a last preamble symbol in
2 the sequence of symbols is different than waveforms of other preamble symbols in the
3 sequence of symbols.
- 1 4. The system of claim 3, wherein the difference between the waveform of
2 the last preamble and the waveforms of other preamble symbols provide a way for the
3 frame synchronizer logic to detect the last preamble symbol.
- 1 5. The system of claim 3, wherein the last preamble symbol immediately
2 precedes the data symbol and the frame synchronizer logic detects the data symbol by
3 detecting the last preamble symbol.
- 1 6. The system of claim 3, wherein the frame synchronizer logic obtains the
2 data symbol by taking a Fast Fourier Transform (FFT) of the preamble symbols,
3 conjugating FFT coefficients, and taking an inverse FFT.

1 13. The method of claim 11, further comprising placing the last preamble
2 immediately before the data symbol.

1 14. The method of claim 11, further comprising detecting the data symbol by
2 recognizing the last preamble symbol.

1 15. The method of claim 11, further comprising obtaining the data symbol by
2 adding a constant to each carrier phase of the preamble symbols.

1 16. A machine-readable medium comprising instructions which, when
2 executed by a machine, cause the machine to perform operations comprising:
3 generating a sequence of symbols, the sequence of symbols including preamble
4 symbols and a data symbol; and
5 receiving the sequence of symbols generated by the transmitter, the receiver
6 including a frame synchronizer logic to perform frame synchronization.